

2006 CODES

On Wednesday, November 15, the Uniform Building Code Commission met as a rule making body and formally adopted the 2006 editions of building codes. The following codes are affective beginning January 1, 2007.

2006 International Building Code
2006 International Residential code
2006 International Plumbing Code
2006 International Mechanical Code
2006 International Fuel Gas Code
2006 International Energy Conservation Code
2006 International Fire Code
2005 National Electrical Code (NEC)

The following codes or standards are incorporated by reference and approved for use as the construction standards which may be applied to existing buildings with the approval of the Building Official:

1. The 1997 edition of the Uniform Code for the Abatement of Dangerous Buildings.
2. The 2006 edition of the International Existing Building Code.
3. ASCE 31-03, Seismic Evaluation of Existing Buildings, promulgated by the American Society of Civil Engineers.
4. Pre-standard and Commentary for the Seismic Rehabilitation of Buildings (FEMA 356)

177 State Amendments were carried forward from the previous code editions.

SIGNIFICANT CHANGES IN THE 2006 IBC

BUILDING PLANNING (CHAPTERS 3 THROUGH 6)

1. (302.1, 508) All the requirements for incidental use areas, accessory occupancies, nonseparated occupancies and separated occupancies have been removed from chapter 3 and relocated as a new section in Chapter 5. The provisions of Chapter 3 are now limited solely to the classification of occupancies, which enhances the usability of the code.
2. (303.1) An assembly space having an occupant load of less than 50 is now permitted to be classified as a group B occupancy when it is accessory to another

occupancy. The accessory use may also be classified as part of the major occupancy.

3. (404.4) Smoke control is not required for atriums that connect only two stories.
4. (406.1.2) The minimum fire-separation distance at which Group U private parking garages and carports are permitted to have nonrated exterior walls and unlimited unprotected openings has been reduced from 10 feet to 5 feet.
5. (406.1.4) Any door between a private garage and a dwelling unit must now be provided with a self-closing device and a means of self latching.
6. (406.4.1) Additional language has been added to clarify that the allowable height and area increases permitted for other types of occupancies are also applicable to enclosed parking garages.
7. (419) A new code section has been created to provide scoping requirements for dwelling units and sleeping unit fire separation in groups I-1, R-1, R-2 and R-3. Walls separating units designed according to Section 708 and horizontal separation according to Section 711.
8. (505.2) The maximum permitted floor area of a mezzanine has been increased from one-third to one-half of the floor area of the room in which it is located, provided the building is of non-combustible construction, an automatic sprinkler system is located throughout and an approved emergency voice-alarm communication system is installed.
9. (506) The area modification equation has been simplified, resulting in no technical changes. $A_a = \{ A_t + [A_t \times I_f] + [A_t \times I_s] \}$
10. (506.4.1) The method for determining the maximum allowable area of a multistory building has been modified so that the maximum total building area shall be such that the sum of the ratios for each such area on all floors as calculated according to Section 508.3.3.2 shall not exceed 2 for two-story buildings and 3 for buildings three stories or higher.
11. (507.3) Group A-1 occupancies (Assembly occupancies with fixed seating to view performing arts or motion pictures) and A-2 occupancies (Assembly uses meant for the consumption of food and/or the consumption of alcohol) are now permitted to be located in a one-story unlimited area building provided they meet other code requirements.
12. (507.5) The required permanent open space of 60 feet surrounding unlimited area buildings has been reduced as much as 20 feet for A-3 buildings and motion pictures theaters, when certain criteria is met.

13. (508.3) Clarifies that there are three distinct approaches when regulating buildings housing multiple occupancies. Accessory occupancies, nonseparated occupancies, and separated occupancies are all available methods of addressing mixed-use condition.
14. (508.3.1) The provisions for accessory occupancies have been relocated and the technical criteria for this method of addressing a mixed-occupancy condition has been revised. The section makes it clear that the allowable area and height of the building shall be based on the allowable height and area of the main occupancy.
15. (Table 508.3.3) The Required Separation of Occupancies Table has been moved from Chapter 3 to Chapter 5 and has been reformatted. The table is much smaller and has added the column which shows separation requirements depending on whether the building is sprinkled or not sprinkled.
16. (509.2) The benefits of Section 509.2 which previously were only available to enclosed parking garages are now available to open parking garages when all the requirements of the section are met.
17. (509.8) The basis of the new section allows for the type of construction for the ground floor, as well as any basement for Group B or M uses, to be evaluated separately from that of the open parking garage above, provided the uses are properly separated and the egress from the garage level is independent from that of the first floor.

FIRE PROTECTION (CHAPTERS 7 THROUGH 9)

18. (702.1) The definition of fire barrier has been modified to limit its application to wall assemblies. A new definition for horizontal assemblies has been introduced to more clearly identify horizontal fire barriers and other fire-resistance-floor and roof assemblies.
19. (704.2.3) The use of fire-retardant-treated lumber is now included as one of the acceptable methods for addressing combustible projections located in proximity to adjacent lot lines or other buildings on the same lot.
20. (706.2.1) This new provision recognizes fire-resistance-rated glazing for use as fire barrier walls when tested per American Society for Testing and Materials (ASTM) method E119. The labeling requirement for this glazing is also listed.
21. (706.7) The maximum size of any single opening permitted in a fire barrier wall has been increased from 120 square feet to 156 square feet. In addition, it has been clarified that the 25% length limitation on fire windows is not applicable in the atrium section.

22. (707.14.1) The requirement providing for an elevator lobby where an elevator lobby opens into a fire-rated corridor has been replaced by a new provision mandating lobbies where the elevator shaft enclosure connects at least four stories. There are exceptions to the above including sprinkled buildings which are not I-3 occupancies or high rise occupancies.
23. (Table 715.4) The minimum rating for a fire door or fire shutter located in a fire partition with a 0.5-hour fire resistance rating has been established as one-third of an hour.
24. (715.4.6.3.1) A provision has been added which requires the use of a specific identifier on fire-protection-rated glazing used in fire-door assemblies that will identify the proper use of the glazing.
25. (716.5.3) In groups B and R occupancies, smoke dampers are no longer required at penetrations of shaft enclosures for kitchen, clothes dryer, bathroom and toilet room exhaust openings with steel exhaust ducts, provided the ducts extend at least 22 inches vertically and a continuously powered exhaust fan allows for continuous upward airflow to the outside.
26. (903.2.1.2) The occupant load threshold at which Group A-2 occupancy, food and drink establishments, must be provided with automatic sprinkler system has been reduced from 300 to 100.
27. (904.11.1) The change reduces the height range for installation of the manual device that actuates the fire-extinguishing system for commercial cooking system. The new requirement is 48" maximum height and 42" minimum height.
28. (905.4) Where a class I standpipe system is required, an exception has been added which may, under certain conditions, eliminate the requirement for a hose connection adjacent to an exit opening in horizontal exit walls.
29. (907.2.9) Where a fully sprinkled group R-2 occupancy requires a manual fire alarm system, the change no longer requires the installation of at least one manual fire-alarm box at an approved location.
30. (910.3) Where smoke and heat vents are required, foot note "c" has been added which establishes a method to determine the ratio of vent area to floor area for Group S-1 storage occupancies where no draft curtains are mandated by the code.

MEANS OF EGRESS (CHAPTER 10)

31. (1003.2) The minimum ceiling height throughout the means of egress system has been changed from 7 feet to 7 feet 6 inches.

32. (1004.1) A new exception permits the building official to assign an occupant load to a room, space, or building that is less than that calculated using the occupant load factor of Table 1004.1.1.
33. A new entry in table 1004.1.1 provides for an occupant load factor of 35 square feet for calculating the design occupant load of a day care use.
34. (1004.7) Additional provisions clarify that where occupiable areas are located in conjunction with fixed seating, such areas must be included in the determination of the total occupant load.
35. (1007.6.2) Where an enclosed exit stairway or an elevator is to be considered as a portion of an accessible means of egress, the requirement for providing an area of refuge is now mandated in fully sprinkled buildings as well as nonsprinklered buildings.
36. (1008.1.1) Interior doors within dwelling units and sleeping units in group R-1 are no longer exempt from the general provisions regulating door width. These doors must now have a clear width of 32 inches.
37. (1008.1.2) The requirement that egress doors be side hinged swinging doors is no longer applicable to patient rooms in health care suites as well as bathroom doors of hotel guest rooms and other Group R-1 sleeping units.
38. (1008.1.8.7) An electronic override for the unlocking of stairway doors from the stairway side is now required for such locked doors in stairways serving four or fewer floors.
39. (1008.1.9) The threshold requirement for panic hardware in assembly and educational occupancies has been reduced from 100 occupants to 50.
40. (1009.5.3) The enclosed usable space under a stairway in a Group R-2 or R-3 is now required to be protected by ½ inch gypsum board on the enclosed side.
41. (1009.7) Circular stairways have been renamed **curved stairways**. Previously, the minimum required inside radius for a curved stairway was determined by doubling the actual width of the stairway. The code change mandates that the smallest radius must be at least twice the **required** width of the stairway, often resulting in a tighter radius.
42. (1009.5.2) The requirement that outdoor stairways, ramps and egress balconies be protected in a manner to minimize or prevent the accumulation of ice and snow has been deleted.
43. (1009.11.2) A complying guard is now required where a roof hatch opening is located within 10 feet of the roof edge.

- 44. (1010.6.3) Where a ramp is not part of an accessible means of egress, the minimum required length of the ramp landing has been reduced from 60 inches to 48 inches.
- 45. (1013.3) In groups R-2 and R-3 occupancies, the maximum permitted opening between intermediate rails or ornamental enclosures in required guards at open sides of stairs has been increased such that a sphere four and three-eighths inches in diameter cannot pass through.
- 46. (1014.2) A means of egress is now permitted to pass through a stockroom serving a group M (mercantile) occupancy, provide four specified conditions are met, addressing hazard level, amount of egress, door hardware, and aisle configuration.
- 47. (1014.3) The maximum length of the common path of egress travel in Group R-2 occupancies has been increased from 75 feet to 125 feet.
- 48. (Table 1015.1) The maximum occupant load permitted for a Group E day care occupancy with a single means of egress has been reduced from 50 occupants to 10 occupants.
- 49. (1015.2.2) In rooms or spaces where the occupant load is 500 or more and three or more exits are required, only two of the doors are now specifically regulated for exit separation. The performance criteria addressing the location of the required additional doors have been deleted. (The performance criteria is now addressed within the Statewide amendments to the IBC)
- 50. (1020.1) A single unenclosed exit stairway is now permitted from a floor level below the exit discharge level, provided the stairway serves a maximum occupant load of nine and is not connected to any other floors.
- 51. (1020.1.7.1) A smokeproof enclosure or pressurized stairway is now permitted to exit through interior areas or a vestibule located on the level of exit discharge, under the limitations imposed by Section 1024.

ACCESSIBILITY (CHAPTER 11)

- 52. (1105.1) The minimum required number of accessible public entrances to a building has been increased from 50% to 60%.
- 53. (1106.1) The minimum required number of accessible parking spaces is now calculated independently for each parking facility on the site, rather than on the basis of the aggregate number of parking spaces. This will result in an increase of accessible parking spaces.

- 54. (1107.5.2.1) The charging criteria for accessible units in Group I-2 nursing homes has been revised to require a minimum on one of each type of dwelling unit or sleeping unit, where multiple types of units are provided.
- 55. (1109.2) The number of single-user toilet or bathing rooms required to be accessible where multiple rooms are clustered at a single location has been increased from 5% to 50% of the total number of rooms provided. In addition, all toilet rooms and bathing facilities designated for use by children in day-care and primary school occupancies must now be accessible.
- 56. (1109.5) Where drinking fountains are provided, consideration must now be made for providing accessibility to both wheelchair users and persons who are standing.
- 57. (1109.7) Three additional conditions have been added when platform lifts may be used as a required accessible route; load and unload areas for amusement rides, play structures, and team or player seating areas for sports activities.
- 58. (1109.14.4) The degree of accessibility required at specific recreational facilities (bowling lanes, court sports, boxing and wrestling rings, refereeing and judging areas, diving boards) has been identified.
- 59. The 2003 ICC/ANSI A117.1 replaces the 1998 version as the new standard for accessibility.
- 60. (ANSI A117.1 Section 604.5.1) In addition to the rear and side grab bars within the accessible restrooms, a vertical grab bar 18 inches minimum in length is required.

BUILDING ENVELOPE AND CONSTRUCTION MATERIALS

- 62. The new code provision regulates operable windows in R-2 and R-3 occupancies where it mandates a minimum height of 24 inches from the finished floor to the clear opening of the window where the distance between such opening height and the grade below exceeds six feet.
- 63. (1504.8) New code section and table have been added to limit the use of stone and gravel on roofs based on the building height, wind speed and exposure category.
- 64. (1707.7) The provisions related to the inspection and testing of mechanical and electrical components for seismic resistance have been revised and clarified. Periodic special inspection is required.

65. (1810.8) New provisions have been added to address micropiles, defined as bored- or grouted-in-place piles no more than 12 inches in diameter and incorporating steel pipe casing and/or steel reinforcement.
66. (Table 2304.9.1) The shank length and diameter dimension of nails have been added to the various fastening tables of Chapter 23.
67. (2305.3.11 and 2308.12.8) When anchoring foundation plates at shear wall and braced wall lines in buildings located in seismic design categories D, E and F, the washer size has been modified to 3 inches by 3 inches by .229 inches thick.
68. (2308.9.3) The distance that braced wall panels must start from each end of a braced wall has been increased from 8 feet to 12.5 feet.
69. An additional alternate bracing method that can be used adjacent to window and door openings has been added. The new method allows a reduction of the width of the full height segment of alternate braced wall panels from 32 inches to 16 inches wide for a one-story buildings, and from 32 inches to 24 inches wide for the first story of a two-story building.
70. (3002.4) A minimum of one elevator must no longer be provided in buildings simply because the building is four or more stories in height. However, if elevators are provided in a four story building, one of the elevators must accommodate an ambulance stretcher whose size has been increased to 24 inches by 84 inches.
71. (3104.5) Where a building is connected to an open parking garage by means of a pedestrian walkway, the sprinkler system mandated by item #1 of the exception as a partial alternative to fire-resistance-rated separations is no longer required in the open parking garage.
72. (3104.11) The requirement for the installation of smoke and heat vents in enclosed pedestrian walkways and tunnels has been eliminated.